

# Calculating Food Costs

**Directions:** Calculate food costs for selected food items. Determine raw yield percentages. Complete the following steps.

- Complete the Unit Cost worksheet below by calculating the unit price for each ingredient and recording the results.

Unit Cost		
Food Product	As-Purchased Price	Unit Price
Stewed tomatoes	29 oz./\$0.95	.03 /oz.
Carrots	1 lb./\$0.95 $\frac{.95}{16}$	.06 /oz.
Apples	6 lbs./\$7.85 $\times 16 = 96 / -1.95$	.06 /oz.
Celery	1 lb./\$1.25	.08 /oz.
Oranges	1 lb./\$0.89	.06 /oz.
Shredded cheese	5 lbs./\$10.25 $\frac{10.25}{80}$	.13 /oz.
Milk	1 gallon/\$2.29 $\frac{128}{129}$	.02 / fl.oz.
Cake flour	50 lbs./\$34.95 $\frac{800}{129}$	.04 /oz.

## Converting Weight & Volume

**Directions, Part 1:** Use the following information to convert the volume measures to weight. Use a separate sheet of paper to do your calculations and attach it to this lab activity. Then answers on the blanks provided.

- If 1 lb. = 2 c., then  $3\frac{1}{2}$  c. =  $1\frac{3}{4}$  lbs
- If 1 lb. = 4 c., then 3 c. =  $\frac{3}{4}$  lb
- If 1 lb. = 2 qt., then 2 c. =  $\frac{1}{4}$  lb
- If 1 lb. = 3 c., then 5 c. =  $1\frac{2}{3}$  lb
- If 1 lb. = 6 c., then 3 c. =  $\frac{1}{2}$  lb
- If 1 oz. =  $1\frac{1}{2}$  T., then 3 T. = 2 oz.
- If 1 oz. =  $1\frac{1}{4}$  t., then  $2\frac{1}{2}$  t. = 2 oz.
- If 3 lb. = 3 qts., then 3 c. =  $\frac{3}{4}$  lb

$$3\frac{1}{2}c = \frac{3\frac{1}{2} \times 16}{2}$$

$$\frac{3.5}{2} =$$

$$1 \text{ lb} = 2 \text{ c.}$$

$$1 \text{ lb} = \frac{3 \text{ c}}{3} \quad 5 \text{ c} = \frac{5 \times 16}{3}$$

$$3 \text{ lb} = 12 \text{ c.} \quad 3 \text{ c}$$

$$\frac{3 \text{ lb}}{3} = \frac{12 \text{ c.}}{3} \quad 4$$

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Converting a Recipe

**Directions:** With your group you need to convert the three recipes given to you and answer any other questions listed.

**Recipe #1:** \_\_\_\_\_ 1.) Yield: \_\_\_\_\_ 2.) Serving Size: \_\_\_\_\_

3.) Use the following formula for the Total Yield Conversion Method to increase the yield of the above recipe by 16 servings. Show your calculation. *Desired yield ÷ existing yield = conversion factor*

4.) Multiply the existing yield of each ingredient by the conversion factor to obtain new ingredient yields. *existing ingredient quantity x conversion factor = new desired quantity*

Ingredient	Amount	Multiplied By	Conversion Factor	Equals	New Yield
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	

5.) What are the HACCP guidelines for your recipe?

**Recipe #2:** \_\_\_\_\_ 1.) Yield: \_\_\_\_\_ 2.) Serving Size: \_\_\_\_\_

3.) Use the following formula for the Total Yield Conversion Method to increase the yield of the above recipe by 16 servings. Show your calculation. *Desired yield ÷ existing yield = conversion factor*

4.) Multiply the existing yield of each ingredient by the conversion factor to obtain new ingredient yields. *existing ingredient quantity x conversion factor = new desired quantity*

Ingredient	Amount	Multiplied By	Conversion Factor	Equals	New Yield
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	

5.) What are the HACCP guidelines for your recipe?

Name

Key

Date

Period

# **Safety Know-How: Part 1** **Study Guide** **Pg. 155-165**

- 1.) Workplace accidents cost the foodservice industry over \$48 billion per year.
- 2.) What three things contribute to workplace accidents?
  - fatigue
  - poor kitchen design
  - minimal training
- 3.) The Occupational Safety and Health Administration (OSHA) enforces workplace standards. Employers are required to post these standards and employees are required to follow.
- 4.) The Environmental Protection Agency (EPA) requires food service operations to track how they handle and dispose of hazardous materials.
- 5.) You should always change your apron if you leave the food preparation area to go into the dining area or the restroom.
- 6.) Gloves protect your hands from injury and also serve as protection against food contamination.
- 7.) Even when wearing gloves what should you still do? wash your hands
- 8.) You should change your gloves:
  - when they become soiled or torn
  - at least every 4 hrs. of single-use
  - after handling any raw food
- 9.) Shoes should be sturdy and slip resistant for safety.
- 10.) All shoes must be closed-toe.
- 11.) If you are unsure about how a piece of equipment works or how to clean it, ask.
- 12.) Define Lockout/tagout: requires all necessary switches on electrical equipment to be locked out and tagged out when malfunctioning
- 13.) Fires are classified according to the type of material that catches fire.
- 14.) Complete the Chart:

Class of Fire	Type of Flammable Material
Class A	wood, paper, cloth, plastic
Class B	grease, oil, chemicals
Class C	electrical cords, switches, wiring
Class D	combustible switches, wiring, metals, iron
Class K	fires in cooking appliances involving oils/fats

15.) Precaution is your best course of action when it comes to fire.

16.) Fire extinguishers are the most common type of fire protection equipment.

17.) A properly ventilated hood system can help remove excess smoke, heat and vapors.

18.) Define emergency: potentially life threatening situation that usually occurs suddenly / unexpectedly

19.) List two general first aid guidelines: -163

- check the scene
- stay calm

20.) List two first aid guidelines for burns: -163

- remove person from the source of heat
- cool the burned skin

21.) List two first aid guidelines for wounds: 164

- put on disposable gloves to protect against infection
- clean the cut w/soap and rinse it under water

22.) List two first aid guidelines for choking:

- perform Heimlich maneuver
- 

23.) List two first aid guidelines for burns:

- repeat?
- -

24.) Define Heimlich maneuver: performed on choking victims

25.) List three instances when the Heimlich maneuver should not be performed:

- person can cough/speak
- unconscious
- pregnant woman

26.) Define Cardiopulmonary Resuscitation: emergency care that is performed on people who are unresponsive

**Critical Thinking:** The answer is not found in the book directly. Think of your own answer based on your knowledge.

**#1) You need to order chicken for your busy fried chicken restaurant. Whole chicken is less expensive than chicken parts, but requires more labor to prepare. Which type of chicken will you order and why?**

**#2) Customers in your restaurant have been complaining that the roasted turkey is too dry. How can you make a more tender moist product?**

**Ch.25 Pasta and Grains**  
**Study Guide**  
**pgs. 551-567**

**Pasta (551-557)**

1.) The main ingredient in pasta is flour.

2.) The other main ingredient in pasta is liquid, such as water or eggs.

3.) Why is oil sometimes added to pasta dough?

give a richer texture

4.) Define semolina: a hard grain wheat flour that is high in the proteins that form gluten

5.) Which cooks faster fresh or dried pasta? fresh

6.) List 5 different types of pasta. Give a description and use for each.

Pasta	Description	Use
a.)		
b.)		
c.)		
d.)		
e.)		

7.) Explain the following quality characteristics of pasta.

a.) Flour <sup>100%</sup> semolina produces the best dry pasta

b.) Freshness hard & brittle; should snap cleanly

8.) Both dry and fresh pasta are usually purchased by weight.

9.) Dried pasta should be brittle and break easily.

The surface should look dull or be marked by small pits/scars.

10.) Fresh pasta is difficult to get a consistent product.

11.) Dry pasta can be stored in a cool dry place for several months.

answers vary

12.) Fresh pasta should be used w/in a few days. It can also be kept in the freezer to be used within a few weeks.

13.) What are two ways that pasta can be cooked?

boiling / baking

14.) How many gallons of water should be used for 3 ponds of pasta? 3 gallons

15.) How should you test to see if the pasta is done? cut w/a fork - if it cuts easily the pasta is done

16.) What piece of equipment do we drain pasta into? colander

17. Describe what al dente means. "to the bite" tender but still firm when bitten into

### Grains (pg. 559-567)

18.) Rice picks up the flavors of other foods so it is often served as

part of a main dish.

19.) Rice increases in volume as it cooks and yields a high profit.

20.) Short-grain rice contains the most starch. It becomes sticky when cooked, but is the most tender type of rice.

21.) Medium - grain is firm when it is hot. It becomes sticky when it cooks.

22.) Long-grain rice remains slightly firm when cooked properly. It can be used in just about any food dish.

23.) Explain brown rice. has had the hull or outer covering removed

24.) White rice has the outer layers of the grain removed. Without the outer layers, the rice grain is white and cooks more quickly w/less water.

25.) What is enriched rice? has a vitamin and mineral coating added to the grain

26.) Explain converted (parboiled) rice. has been partially cooked w/ steam and then dried. removes some of the surface starch and increases the nutrient value

27.) Cooking rice and grains involves adding enough water to make the grain moist and tender.

28.) To boil grains, the grain is added to slightly salted boiling water and simmered until tender.

29.) To steam grains, and the appropriate amount of boiling liquid to the grain. Cover and cook the grain until the liquid is completely absorbed.

30.) Braising or the pilaf method, involves sautéing the grain in oil or butter before adding the liquid.

31.) We will be using the risotto method. List the eight steps of the risotto method.

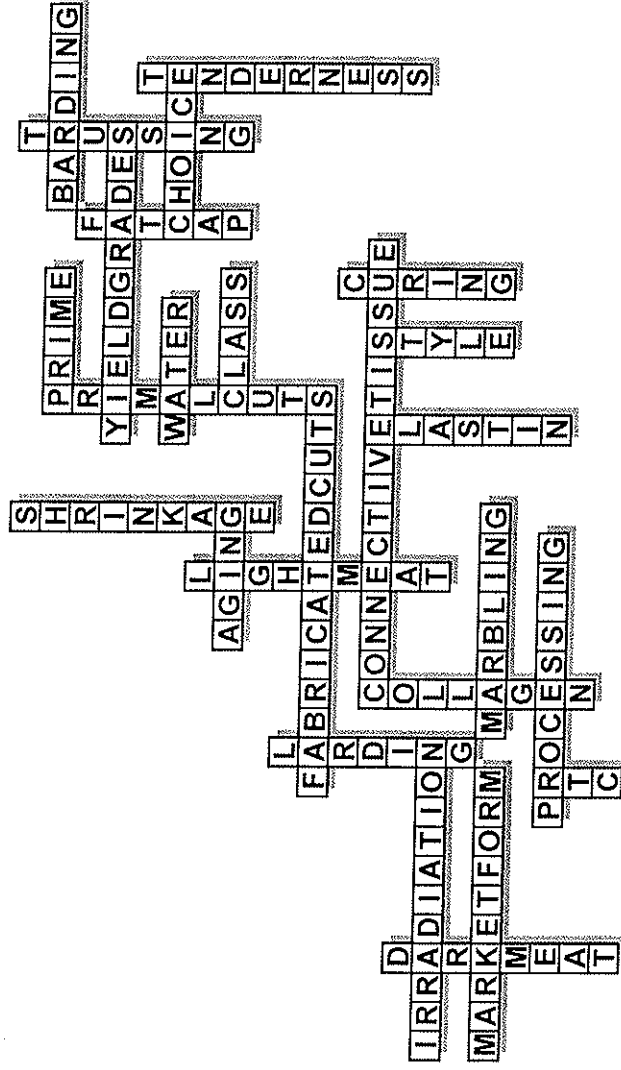
- 1.) simmer the liquid
- 2.) heat fat in separate saucepan
- 3.) add onion/garlic/seasonings to melted fat  
sauté for 2 min.
- 4.) add grains to pan - stir DO NOT SCORCH
- 5.) gradually add simmering liquid in stages
- 6.) test for doneness
- 7.) remove saucepan from heat source
- 8.) add butter, herbs, cheese - mix and serve



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Poultry and Meat

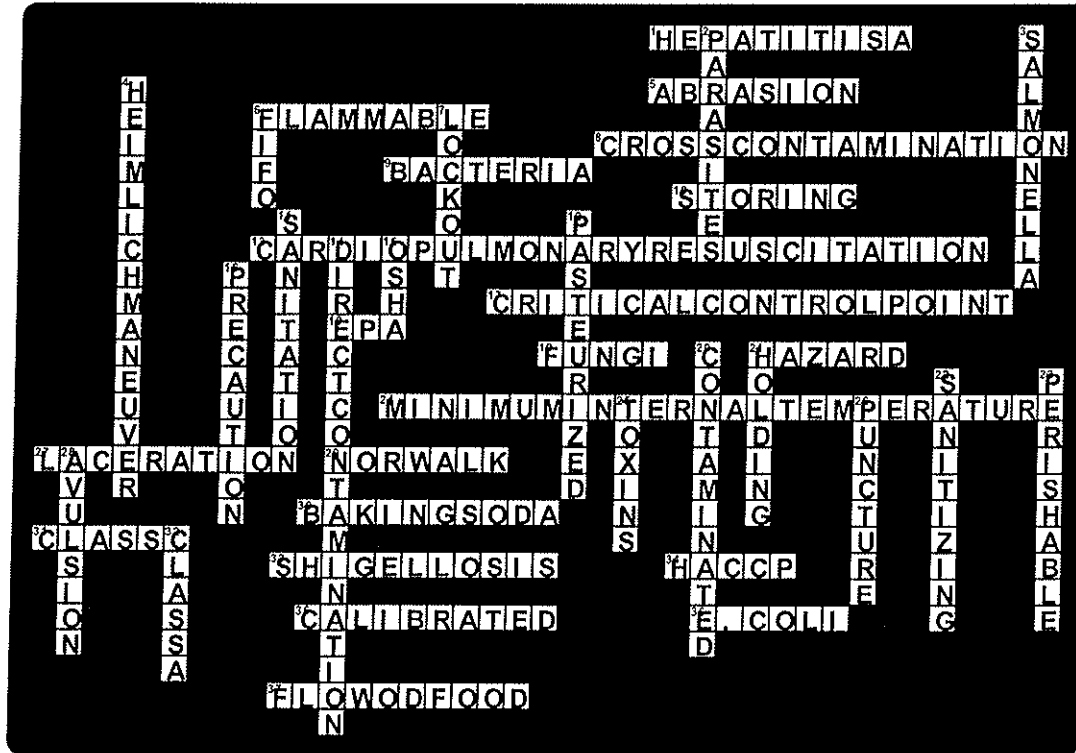


Ch.7 and Ch.8

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Safety and Sanitation/HACCP Applications



## 2008-2009 Culinary Arts Foundations Lab Procedures

The Culinary Arts Foundations course is to prepare students for Culinary Arts Careers and to work in the foodservice industry. You are expected to behave in a responsible, professional manner at all times. Respect is expected and earned.

### Lab:

1. Work together
2. Keep areas clean
3. Stay on task
4. Complete tasks
5. Wear proper uniform
6. Work efficiently

### Dress Code and Grooming:

It is your responsibility to bring and wear proper uniform. Failure to do so will result in deducted lab points and extra cleaning jobs / assignments.

### Culinary Uniforms:

1. **Shoes** should be sturdy, slip resistant and closed toed. You may NOT wear flip flops, high heels, boots or shoes with a soft top.
2. **Pants** must be as long as your shoes. No sweat pants, torn pants, or workout pants.
3. Chef hats must be worn at all times. No baseball caps or other hats.
4. Aprons must be worn.

Guys are expected to be clean shaven. Mustaches and beards are not permitted.

Fingernails must be kept clean and short. Nail polish and fake nails are not permitted (per State Board of Health).

Hair should be neatly maintained, clean, and under control at all times. Long hair should be worn under hats and pulled back in the Threshold. Grooming can only be done in the restroom.

Jewelry is not permitted in the kitchen. Small earrings, watches, and bracelets are permitted in the Threshold. NO facial jewelry is permitted.

### Lab Procedures:

- Always observe safety principles with equipment, utensils, and food. Any injury should be immediately reported to the instructor.
- Practice proper sanitation at all times. Use taster spoons to taste food.
- Thoroughly clean all dishes when done using them. Clean counters, equipment, and floors surrounding your work area after use.
- Everyone is responsible for sweeping, mopping, cleaning, washing dishes, pots and pans, putting items away, wiping down dish rooms, scouring sinks, etc.
- Do not sit down once your job is completed until instructor approves your completion.

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## GROUP 1 SCAVENGER HUNT

1. ½ STEAM TABLE PAN
2. 2 OZ. PLASTIC SOUFFLE CUP
- ~~3. WHITE DINNER NAPKIN~~
4. COLANDER
5. FULL SIZED DEEP STEAM TABLE PAN
6. MEDIUM SALAD CROCK
7. MELON BALLER
8. UTILITY TRAY
- ~~9. 1 POUND WEIGHT FOR BALANCE SCALE~~
10. SMALL SALAD PLATE
- ~~11. SMALL SERVER TRAY FOR BEVERAGES~~
- ~~12. #40 SCOOP~~
13. SOUP SPOON
14. MEDIUM MIXING BOWL
15. SALAD SHELL MAKER
16. 10 INCH PLATE
17. PIE MARKER
18. 1 GALLON LIQUID MEASURE (PITCHER)
19. COFFEE THERMAL POT
20. VEGETABLE BRUSH
21. SHAKE CUP
22. COFFEE CUP
23. DINNER FORK
24. 1/6 STEAM TABLE PAN
25. MEAT FORK (2 TINED FORK)
26. WOODEN SPOON
27. FLAT RACK
28. HOT TEA POT
- ~~29. RAREBIT DISH~~
30. SPRING FORM PAN
31. ANGEL FOOD CAKE PAN
32. CHINA CAP